PREPARED FOR INDUSTRY

Waterloo’s Mathematics, Business, and Accounting programs are designed to give you a career-ready edge. You’ll be prepared to tackle challenges in the classroom and in the boardroom.

An international exchange term is the perfect complement to the technical skills you gain during your undergraduate career.

Tackling 2 degrees, co-op, and an international exchange may seem like a lot, but with careful planning and help from an academic advisor, Abheek was able to do it all.
Mathematics/Business Administration is a single-degree program that has graduated more than 2,000 students and has well-established ties with the industry. The program is right for students who want to combine a strong background in mathematics and business administration.

Programs

MATH/CPA PROGRAM

- Mathematical Optimization
- Mathematical Finance
- Mathematical Economics
- Supply Chain Management
- Marketing Communications
- Human Resource Management
- Finance
- Financial Planning

Not sure which Mathematics, Business, and Accounting program is right for you? Check out our comparison chart, on page 5.

RISK MANAGEMENT

- Credit Risk
- Market Risk
- Operational Risk

FINANCIAL ANALYSIS

- Financial statement analysis
- Management compensation
- Capital budgeting
- Financial statements for investment, valuation, and other economic decisions

EXPERIENCE THE WATERLOO ACCOUNTING ENVIRONMENT

The School of Accounting and Finance is routinely accredited by CPA Canada. As a result, Math/CPA students:
- have the opportunity to gain up to 16 months of CPA-approved work experience through co-op work terms
- are exempt from the CPA Professional Education Program upon completion of the 4-month Master of Accounting (MAcc) program at Waterloo

In this undergraduate program, you’ll focus on either financial analysis or risk management.

Financial Analysis

- Financial statements
- Financial management
- Capital budgeting
- Financial statements for investment, valuation, and other economic decisions

Risk Management

- Credit Risk
- Market Risk
- Operational Risk

The average score of Mathematical Finance students on the Euclid mathematics contest was 9.38 out of 10 in 2019.

Information Technology Management

- Analyze and evaluate business processes
- Integrate cutting-edge technology solutions with contemporary business processes

Mathematical Economics

- Mathematical Optimization
- Mathematical Finance
- Mathematical Economics
- Supply Chain Management
- Marketing Communications
- Human Resource Management
- Finance
- Financial Planning

The increasing focus on credit, operational, market, and financial risk management means graduates will have a wide range of career opportunities. Selecting the risk management specialization will help you prepare for a Professional Risk Manager (PRM) designation, offered through the Professional Risk Managers’ Association.

Waterloo’s Mathematics/Financial Analysis and Risk Management, Finance Specialization has been recognized by the CFA Institute.

For further information, visit cfa.com.

According to the CFA Institute, PRM is currently required to pursue a professional CPA designation. Mathematics/Financial Analysis and Risk Management, Finance Specialization students can prepare for a dynamic career in government and industry by combining studies in economics and mathematics.

Designed for students with elite mathematical abilities, this major in the most advanced undergraduate finance program offered in North America. Offered jointly by the Faculty of Mathematics and the Department of Economics in the Faculty of Arts, the program builds quantitative skills in economics, management, and information technology. Students are established as leaders of tomorrow by integrating cutting-edge technology solutions with contemporary business processes.

For further information, visit prmia.org.
Choosing Your Adventure

Not sure which of our Mathematics, Business, and Accounting programs is best for you? Below, we’ve listed differences between the programs, from how many co-op terms you’ll have to how many courses you’ll need to take. These are important things to consider when you’re figuring out which program to apply to.

### System of Study

<table>
<thead>
<tr>
<th>Program</th>
<th>Regular or Co-op</th>
<th>Co-op or Regular</th>
<th>Co-op only</th>
<th>Co-op only</th>
<th>Co-op and Regular</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH/FINANCIAL ANALYSIS AND RISK MANAGEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFORMATION TECHNOLOGY MANAGEMENT, MATHEMATICAL ECONOMICS, AND MATHEMATICAL OPTIMIZATION</td>
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</tr>
<tr>
<td>MATHEMATICS/CHARTERED PROFESSIONAL ACCOUNTANCY BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
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### Total Length of Program

<table>
<thead>
<tr>
<th>Program</th>
<th>Years</th>
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<tbody>
<tr>
<td>MATH/FINANCIAL ANALYSIS AND RISK MANAGEMENT</td>
<td>4 2/3 years (co-op), 3 2/3 years (regular)</td>
</tr>
<tr>
<td>INFORMATION TECHNOLOGY MANAGEMENT, MATHEMATICAL ECONOMICS, AND MATHEMATICAL OPTIMIZATION</td>
<td>4 2/3 years (co-op), 3 2/3 years (regular)</td>
</tr>
<tr>
<td>MATHEMATICS/CHARTERED PROFESSIONAL ACCOUNTANCY BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
<td>5 years</td>
</tr>
<tr>
<td>MATHEMATICS/BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
<td>4 2/3 years (co-op), 3 2/3 years (regular)</td>
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### Number of Study Terms

<table>
<thead>
<tr>
<th>Program</th>
<th>Terms</th>
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<td>MATH/FINANCIAL ANALYSIS AND RISK MANAGEMENT</td>
<td>8</td>
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<tr>
<td>INFORMATION TECHNOLOGY MANAGEMENT, MATHEMATICAL ECONOMICS, AND MATHEMATICAL OPTIMIZATION</td>
<td>8 + 2 for MAcc</td>
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<tr>
<td>MATHEMATICS/CHARTERED PROFESSIONAL ACCOUNTANCY BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
<td>10</td>
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<tr>
<td>MATHEMATICS/BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
<td>8</td>
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### Number of Work Terms

<table>
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<th>Terms</th>
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<td>MATH/FINANCIAL ANALYSIS AND RISK MANAGEMENT</td>
<td>6</td>
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<tr>
<td>INFORMATION TECHNOLOGY MANAGEMENT, MATHEMATICAL ECONOMICS, AND MATHEMATICAL OPTIMIZATION</td>
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</tr>
<tr>
<td>MATHEMATICS/CHARTERED PROFESSIONAL ACCOUNTANCY BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
<td>5</td>
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<tr>
<td>MATHEMATICS/BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
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### Number of Courses

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<tr>
<td>INFORMATION TECHNOLOGY MANAGEMENT, MATHEMATICAL ECONOMICS, AND MATHEMATICAL OPTIMIZATION</td>
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<tr>
<td>MATHEMATICS/CHARTERED PROFESSIONAL ACCOUNTANCY BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
<td>52</td>
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<tr>
<td>MATHEMATICS/BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
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### Number of Electives

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<tr>
<th>Program</th>
<th>Electives</th>
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<tr>
<td>MATH/FINANCIAL ANALYSIS AND RISK MANAGEMENT</td>
<td>4-5</td>
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<tr>
<td>INFORMATION TECHNOLOGY MANAGEMENT, MATHEMATICAL ECONOMICS, AND MATHEMATICAL OPTIMIZATION</td>
<td>3-4</td>
</tr>
<tr>
<td>MATHEMATICS/CHARTERED PROFESSIONAL ACCOUNTANCY BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
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<tr>
<td>MATHEMATICS/BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
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### Approximate Number of Spaces

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<th>Spaces</th>
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<td>MATH/FINANCIAL ANALYSIS AND RISK MANAGEMENT</td>
<td>90</td>
</tr>
<tr>
<td>INFORMATION TECHNOLOGY MANAGEMENT, MATHEMATICAL ECONOMICS, AND MATHEMATICAL OPTIMIZATION</td>
<td>60</td>
</tr>
<tr>
<td>MATHEMATICS/CHARTERED PROFESSIONAL ACCOUNTANCY BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
<td>65</td>
</tr>
<tr>
<td>MATHEMATICS/BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
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### Degree Earned

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<tr>
<th>Program</th>
<th>Degree</th>
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<tbody>
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<td>MATH/FINANCIAL ANALYSIS AND RISK MANAGEMENT</td>
<td>Honours BMath (regular or co-op)</td>
</tr>
<tr>
<td>INFORMATION TECHNOLOGY MANAGEMENT, MATHEMATICAL ECONOMICS, AND MATHEMATICAL OPTIMIZATION</td>
<td>Honours BMath (regular or co-op)</td>
</tr>
<tr>
<td>MATHEMATICS/CHARTERED PROFESSIONAL ACCOUNTANCY BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
<td>Honours Co-op BMath (leads to optional MAcc)</td>
</tr>
<tr>
<td>MATHEMATICS/BUSINESS ADMINISTRATION AND MATHEMATICS DOUBLE DEGREE</td>
<td>Honours Co-op BMath (Waterloo), Honours BBA (Laurier)</td>
</tr>
</tbody>
</table>

A Well-Rounded Experience

With our Mathematics, Business, and Accounting programs you’ll need to work hard so you can get far. That said, you will still have time for life outside the classroom. Co-op terms, athletics, student clubs and societies, and international experiences will give you the well-rounded experience you crave.

### Time for a Coffee Fix Before Classes Start

8 A.M.

### Early Morning Calculus Means More Time to Work on Your Assignments Before Attending tutorials.

8:30 A.M.

### Wrap Up Evening Classes and Head to Math and Computer (MC).

10 A.M.

### Meet Up with Friends to Review Your Tutorial Assignment.

12:30 P.M.

### Head to the Fourth Floor of MC to Drop Off Your Assignment.

3:30 P.M.

### Time for a Club Meeting to Discuss This Term’s Activities.

5 P.M.

### Prepare for Your Interview by Researching the Company.

7:30 P.M.

### Take a Break by Borrowing a Board Game from the Mathematics Society Office.

Waterloo.ca/math/get-involved
BEYOND GRADUATION

Endless possibilities.

GRADUATES WITH A SKILL SET COMBINING MATHEMATICS AND BUSINESS ARE IN HIGH DEMAND

Your portfolio is perfected. You’re ready to command the boardroom. Where you want to work is up to you. Our alumni are savvy business professionals who help elevate companies and their clients.

36,000
Waterloo BMath and BCS grads in more than 100 COUNTRIES

UNSURE OF WHERE YOUR DEGREE CAN TAKE YOU? HERE ARE A FEW EXAMPLES.

Chris Krmpotic
BMath 1991
Consultant, Investors Group, Financial Services, Waterloo, ON

Don MacInlyre
BMath 1995
Partner, Hurryen Sinclair MacInlyre CPAs LLP, Ajax, ON

Ajay Jumalakar
BMath 1995
CFO, Kroll Bond Rating Agency, New York, NY

Angella A. Hughes
BMath 1995
President and CEO, Xogen Technologies, Orangeville, ON

Victoria Watson
BMath 2001
Senior Manager, BDO Canada, Owen Sound, ON

William Chan
BMath 2009
Vice President, Deutsche Bank Securities, New York, NY

Laura Chelaru
BMath 2010
Junior Portfolio Manager, TD Asset Management, Toronto, ON

Milenko Siklajvan
BMath 2010
Investment Banking Associate, Goldman Sachs, Chicago, IL

Claire Liu
BMath 2013
Senior Actuarial Associate, Manulife Financial, Waterloo, ON

Ritika Bhargava
BMath 2013
Senior Actuarial Associate, Manulife Financial, Waterloo, ON
ENGLISH LANGUAGE REQUIREMENTS

If English is not your first language and your 4 most recent years of full-time education have not been taught in English, you’ll be required to submit one of these English language test scores.

INTERNET-BASED TOEFL IELTS

<table>
<thead>
<tr>
<th>TEST</th>
<th>TOTAL</th>
<th>LISTENING</th>
<th>SPEAKING</th>
<th>READING</th>
<th>WRITING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOEFL iBT</td>
<td>60</td>
<td>12</td>
<td>12</td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

Students with an overall IELTS score of 7.0 and no band score below 6.5 may be given individual consideration for admission to full-time undergraduate studies. Get deadlines and other details: uwaterloo.ca/future/admissions.

AMIN SCIENCE

2018 REQUIREMENTS

PROGRAM | FIELD | SYSTEM OF STUDY | AREA OF STUDY | REQUIRED COURSES | GRADE 12 UNITS (AFTER SPECIFIED) | MINIMUM ENGLISH LANGUAGE REQUIREMENTS | EMERGING TOEFL | IELTS | CAEL | MELAB | PTE | RESULT |
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</thead>
<tbody>
<tr>
<td>Business Administration ( Laurier) and Mathematics (Waterloo)</td>
<td>Double Degree</td>
<td>Regular/Co-op</td>
<td>Business Administration, Laurier and Mathematics (Waterloo): specializations on page 3</td>
<td>Advanced Functions, Calculus and Vectors, any other Grade 12 U course</td>
<td>Admission Information Form</td>
<td>Individual selection from the low 80s</td>
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<tr>
<td>Mathematics</td>
<td>Regular/Co-op</td>
<td>Mathematical Finance</td>
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</tr>
<tr>
<td>Mathematics/Business Administration</td>
<td>Regular/Co-op</td>
<td>Information Technology Management, Mathematical Economics, Biological beginning in second year</td>
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</tr>
<tr>
<td>Mathematics/Chartered Professional Accountancy</td>
<td>Co-op</td>
<td>Mathematics/Chartered Professional Accountancy Open to Canadian Citizens and Permanent Residents only</td>
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</table>

Individual selection speaks to content submitted on the Admission Information Form. Admission decisions are strongly based on academic performance, but extra-curricular activities and extraneous circumstances are also taken into consideration.

ADMISSION NOTES

> Admission decisions are based on your high school grade average, including required courses. Students may be penalized on their Admission Information Form (AIF) score for repeated courses and required courses taken outside of regular day school.

> The AIF is to be submitted after applying through OUAC. The AIF includes questions about your extracurricular activities and work experience. Completion of an AIF is required for admission to all programs.

> If you’re not offered admission to the program of your choice, you may be considered for other Mathematics programs.

> Participation in the Euclid and the Canadian Senior Mathematics Contests is strongly recommended.

After you’ve applied - Watch for our email with your Waterloo ID number and details on what to do next.

It’s worth the wait - In an effort to base our decisions on the most relevant grades possible, most admission offers for Mathematics programs are made in early May. We base our decisions on your interim or final grades for all required courses and your AIF.

CONTESTS

Get contest preparation resources, registration details, and deadlines: cemc.uwaterloo.ca.

EUCLID MATHEMATICS CONTEST

While the Euclid Mathematics Contest is not required for admission, your participation is strongly encouraged, and is an asset to your application — more than 60% of our incoming class for Fall 2017 wrote the Euclid. The contest is required for Entrance Scholarship consideration. The contest will be written in your high school on April 11, 2018.

CANADIAN COMPUTING COMPETITION (C/C)

The CCC is not required for admission, but a high score may be an asset for admission to the Cheriton School of Computer Science programs. The CCC will be written on February 14, 2018.

CO-OP OR REGULAR?

Some Mathematics, Business, and Accounting programs are offered with co-op or regular while some are co-op only.

Not sure which is right for you? We've made it easy to compare the differences.

REGULAR – FAST TRACK TO GRADUATION

If you want to graduate sooner, to start your career or attend graduate school, then the regular system of study is an option for you. The Centre for Career Action can help you land a great summer job or make sure you’re on the right career path. Get the details: uwaterloo.ca/career-action.

Regular takes less than 4 YEARS to complete and you’ll have summers off between academic terms to work, study, or travel.

CO-OP – EARN AS YOU LEARN

Through co-op you’ll have opportunities to explore potential career paths. You’ll make career contacts and pick up transferable skills that will be an asset after graduation. Get the details: uwaterloo.ca/co-op.

Get the co-op advantage more than 4,000 co-op employers worldwide

ENTRANCE SCHOLARSHIPS

President’s and Most Merit Scholarships No application required: Student Financial office Scholarship application required: February 15, 2018

FACULTY OF MATHEMATICS SCHOLARSHIPS

Scholarships ranging in value from $5,000 to $50,000 – awarded to all students who meet marks criteria and apply to enter Faculty of Mathematics.

FACULTY OF MATHEMATICS SCHOLARSHIPS

Scholarships ranging in value from $5,000 to full cost

FINANCING YOUR EDUCATION

When thinking about university, it's important to prepare a realistic budget for your first 8 months (2 terms).

> List your financial needs: tuition and other student fees, residence fees, books, supplies, living expenses. uwaterloo.ca/future/financing

> List the financial resources available to fund your education: savings, RESP, co-op earnings (if applicable).

> Augment your resources, if you’re eligible, with scholarships, provincial financial aid (such as Ontario’s OSAP program), and a Waterloo Entrance Bursary.

> You only pay 4 months (one term) at a time.

> Participate in contests and apply for entrance scholarships.